

ABSTRACT OF THE DISCLOSURE

1 A laser module comprises a laser diode secured on a semiconductor
2 substrate for emission of a forward laser beam from its front end and a
3 backward laser beam from a point source on its rear end in a horizontal
4 direction. A photodiode, also secured on the substrate, has a light receiving
5 surface extending in the horizontal direction by length L from an edge
6 proximate to the laser diode for receiving a lower half of the backward laser
7 beam, the light receiving surface being lower than the point source by a
8 vertical distance Y , the edge being spaced a horizontal distance Z from the
9 point source of the laser diode, wherein the horizontal distance Z is equal to or
10 greater than $(Y / \tan \theta) - L$, where θ is a vertical angle in which the lower half of
11 the backward laser beam radiates from the point source.